



United States
Environmental Protection
Agency

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News Release

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FOR IMMEDIATE RELEASE

Drinking water wells near the Pasco sanitary landfill will be sampled this month by the U.S. Environmental Protection Agency to see if they have been contaminated by organic chemicals that are known to have seeped into soil and groundwater under and around the landfill.

Announcement of the sampling program was made today by Robie G. Russell, EPA's Northwest regional administrator in Seattle.

"It's a precautionary move on EPA's part to check the drinking water wells," Russell said. "Although the nearest downgradient well is more than a half mile from the landfill, EPA wants to be sure that the organic chemicals have not migrated into the water that people drink."

EPA's chief concerns during the October sampling effort will be trichloroethylene and tetrachloroethylene, the two organic chemicals found in soil and groundwater close to the landfill at levels that exceed EPA's current guidelines for drinking water. The chemicals were discovered during an EPA study that was completed earlier this year to determine if any herbicide wastes buried at the landfill were migrating into the surrounding soil and groundwater. No evidence was found of any migration of the herbicide wastes.

EPA will also test a nearby irrigation well to see if these chemicals would cause any problem for irrigation.

The Pasco landfill falls under the regulations of the Washington Department of Ecology and operates under a permit issued by the Benton-Franklin County Health Department. A new permit, currently under development, is expected to place more stringent operating conditions on the landfill.

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ENVIRONMENTAL STUDY FINDINGS

PASCO SANITARY LANDFILL

WHAT WAS THE PURPOSE OF THE STUDY?

The Environmental Protection Agency (EPA) conducted a study at the Pasco Sanitary Landfill, Pasco, Washington. The purpose of the study was to determine if herbicide wastes had migrated off-site. These wastes were buried in five sections of the landfill that were previously owned and operated by the Resource Recovery Corporation (RRC). In these sections of the landfill, the RRC received and disposed of industrial waste materials that are now classified as hazardous wastes, including herbicide wastes. EPA was concerned because herbicide wastes are sometimes contaminated with low levels of dioxin, a chemical that is acutely toxic to aquatic life and that may have health implications for humans.

HOW WAS THE STUDY DONE?

EPA took 18 composite soil samples and 15 groundwater samples downgradient of the industrial waste disposal areas where migration was most likely to occur. The soil and groundwater samples were analyzed for EPA's list of hazardous substances, including the herbicides of concern. Field work was completed in the summer of 1985. The map on page 3 shows the location of the disposal areas and the sampling locations. The study was carried out with the full cooperation of the current owner and operator of the landfill.

WHAT WERE THE STUDY FINDINGS?

From this investigation, EPA found no evidence of herbicide waste migration from the disposal areas. The lack of herbicide waste migration also means that dioxin contamination is not likely to be a problem at this site. Several other chemical compounds were detected outside the disposal areas (see below). However, EPA does not believe that these compounds pose an immediate threat to human health or the environment.

As would be expected in a landfill, several organic and inorganic compounds were detected in the soils and groundwater near the industrial wastes disposal areas. The main route of possible human exposure to the chemicals is through groundwater. The following therefore summarizes EPA findings regarding groundwater in the area.

The groundwater at the landfill was encountered at 40-77 feet below the land surface. It flows in a southwesterly direction.

No herbicide wastes were detected in the groundwater, but several other organic compounds were found. The most significant levels found were for trichloroethylene and tetrachloroethylene which were found in concentrations above EPA's current drinking water guidelines.

DOES THIS
STUDY MEAN
THERE IS A
PROBLEM?

This data indicates that groundwater in the vicinity of the landfill is contaminated and should be monitored closely. There are several drinking water wells downgradient of the site and within one mile of the site. To be certain there is no health threat, EPA will be sampling these wells in the next month to determine if the wells are contaminated.

Other wells in the area are used for irrigation. EPA will test nearby irrigation wells to see if these compounds pose a problem for irrigation. If these compounds did reach the irrigation wells, they are likely to volatilize during the spraying and then undergo airborne photo-decomposition.

In sum, EPA sees no immediate concerns for public health or the environment at this site. In cases such as this, EPA routinely compares the potential health risks posed by the site to risks at other sites. EPA uses a mathematical model Hazard Ranking System to score and evaluate potential risks. Sites with high enough scores are considered for placement on EPA's National Priority List (NPL). Sites on this list are eligible for funds under the Superfund program to fully examine pollutants at and around the site and to undertake cleanup actions if necessary.

WHAT WILL
HAPPEN NEXT
AT THE
LANDFILL?

The site continues to operate as a municipal landfill according to the Department of Ecology regulations. Monitoring and permitting of this site is in the jurisdiction of Ecology and the county health department.

Based on study findings, EPA recommended that the agencies consider the following recommendations in the management and oversight of the landfill:

1. Re-cover with soil all areas where erosion or site activities have exposed the plastic liner to preserve liner integrity.
2. Re-sampling and re-analysis of samples from each of the on-site monitoring wells and several of the surrounding irrigation wells in order to explain the variations in the concentrations of inorganic compounds.
3. Continue to sample groundwater twice a year to detect any on-set of migration from each burial zone and to monitor the area of known contamination.
4. If herbicide or herbicide waste materials are detected future monitoring, the potential for dioxin contamination exists. Migration of the material should then be evaluated.

According to representatives of the Department of Ecology and the county health department, the agencies are considering the EPA findings and recommendations to reissue the landfill operating permit. More stringent operating conditions will be placed on the landfill.

Finally, as mentioned above, EPA will be sampling nearby drinking water wells to ensure there is no health threat from these wells. This sampling will take place in October 1986.

QUESTIONS?

Please call the following people for more information:

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Location of Environmental Study

